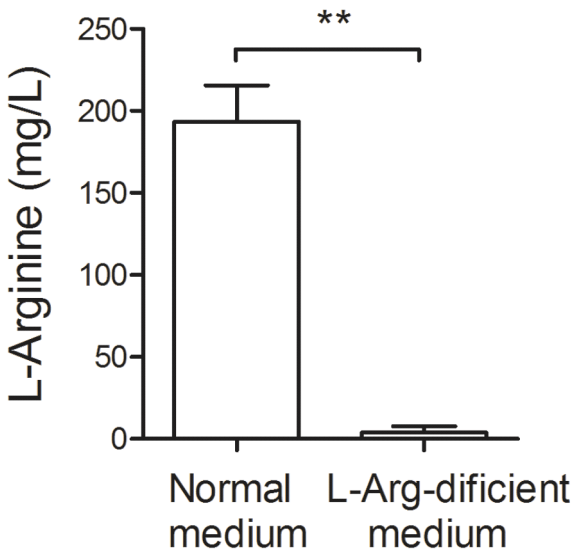

Figure S1 The concentration of L-Arginine in Normal RPMI-1640 cell culture medium and L-Arginine-deficient medium was measured using HPLC analysis. Data was expressed as mean ± SD from three independent experiments. ** $p<0.01$

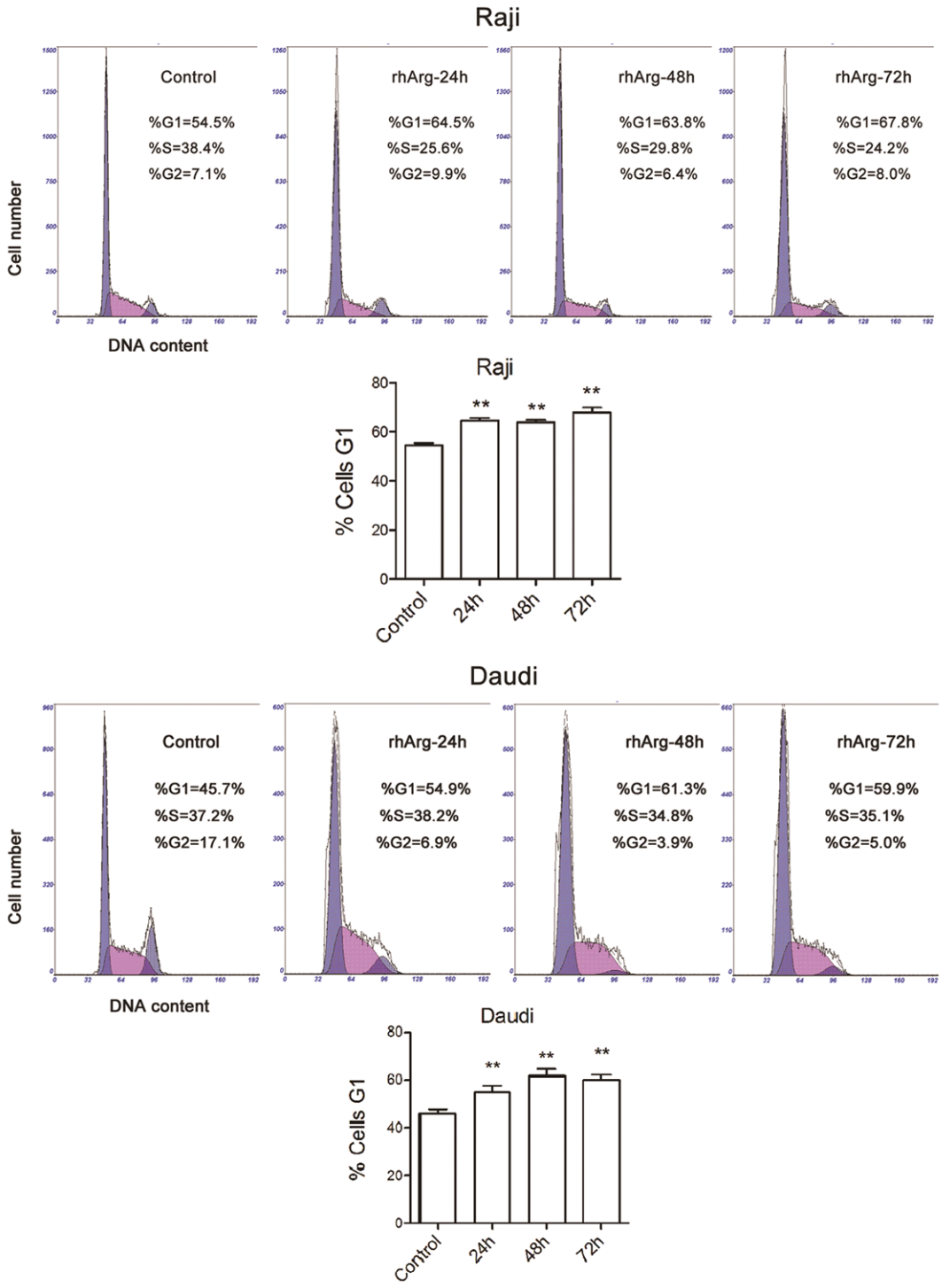

Figure S2 Raji and Daudi cells were treated with 1IU/ml rhArg for 24, 48 or 72h. Cell cycle distribution was analyzed using flow cytometry. In flow cytometry plots, data represented the mean of triplicate determinations. The percentage of cells in G1 phase was expressed as mean ± SD in bar graphs. Similar results were obtained from two independent experiments. **: versus control, $p<0.01$

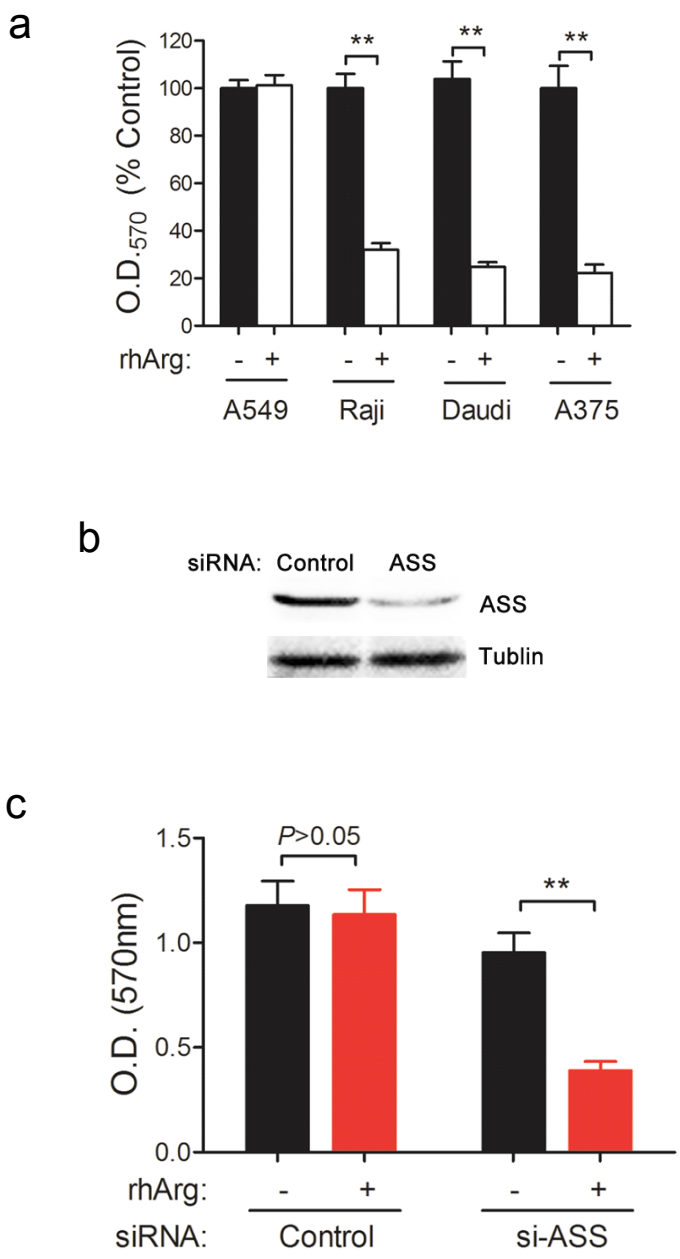

Figure S3 **(a)** A549, Raji, Daudi, and A375 cells were treated with 1 IU/ml of rhArg for 48 h. Cell viability was measured by MTT assay. Viability of untreated group was expressed as 100%. Error bars were standard error of the mean of triplicates. $^{**}p<0.01$ **(b)** A549 cells were transfected with ASS-siRNA or control-siRNA. The expression of ASS was detected by western blot 72h later. **(c)** After siRNA transfection for 48h, A549 cells were treated with 1IU/ml of rhArg for further 48h, cell viability was measured by MTT assay. Error bars were standard deviation of triplicates. Similar results were obtained from two independent experiments. $^{**}p<0.01$